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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,528	02/19/2004	Ian M. Patterson	1578.119	3253

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EXAMINER
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GARY, ERIKA A

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/782,528

Applicant(s)

PATTERSON ET AL.

Examiner

Erika A. Gary

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities: it appears that "the first database" on line 14, should be "the first table". Appropriate correction is required.
2. Claim 18 is objected to because of the following informalities: it appears that "claim 1" on line 30, should be "claim 15". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 5 recites the limitation "the network part" in line 11. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 13 recites the limitation "the first network part and the second network part" in lines 22 and 23. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 7, 8, and 10-19 are rejected under 35 U.S.C. 102(e) as being anticipated by De Beer, US Patent Application Publication Number 2005/0101323 (hereinafter De Beer).

Regarding claims 1 and 15, De Beer discloses a radio communication system having a mobile node operable to communicate data by way of a radio link with a fixed network, the mobile node associated with a home network provider that provides communication services for communication with the mobile node when the mobile node is positioned to communicate with a first portion of the fixed network, and the mobile node permitted mobility, selectably to be positioned to communicate with at least a second portion of the fixed network, communication services provided at the at least the second portion of the fixed network by at least one non-home network provider, an improvement of apparatus for facilitating determination of routing information by which to route the data communicated by the mobile node when positioned to communicate with any of the first and at least second portions of the fixed network, said apparatus comprising: a registration request detector adapted to receive indications of a registration request generated by the mobile node, said registration request detector for detecting values of the registration request; at least a first table accessible at least responsive to detection by said registration request detector of the values of the registration request, said first table containing routing information indexed together with

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indicia associated with selected values of the registration request; a routing determiner adapted selectably to receive indications of selected routing information contained in said at least the first table, said routing determiner, responsive at least in part to the routing information, for determining routing by which the data is to be communicated by the mobile node, the routing determined by said routing determiner usable by the mobile node when positioned to communicate with the any of the first and at least second portions of the fixed network [figs. 1, 10; paragraphs 0033-0035, 0055].

Regarding claims 2, 4, and 16, De Beer discloses the registration request detector is adapted to receive comprises identification of the home network provider with which the mobile node is associated and wherein the indicia associated with the selected values of the registration request indexed together in said first table comprises the identification of the home network provider [fig. 20; paragraphs 0055, 0061].

Regarding claims 3 and 17, De Beer discloses the registration request detector is adapted to receive further comprises identification of the non-home network provider when the mobile node generates the registration request when positioned to communicate with the at least the second portion of the fixed network, and wherein the routing determined by said routing determiner is further responsive to the identification of the non-home network provider [paragraphs 0055, 0061, 0133].

Regarding claims 7 and 18, De Beer discloses the at least the second portion of the fixed network comprises the second portion and at least a third portion, wherein the second and third portions, respectively, encompass at least partially overlapping coverage areas, communication services provided at the second portion by a first non-

home network provider and communication services provided at the third portion by a second non-home network provider, the routing determined by said routing determiner further responsive to whether roaming agreements are in place between at least one of the home network provider and the first non-home network provider and the home network provider and the at least the second non-home network provider [paragraphs 0027, 0035].

Regarding claims 8 and 19, De Beer discloses the routing determined by said determiner is further responsive to whether the agreements, if any, in place between the home network provider and the first non-home network provider and the home network provider and the at least the second non-home network provider comprise bi-directional agreements [paragraph 0027].

Regarding claim 10, De Beer discloses the routing determined by said routing determiner comprises direct routing forming direct paths between at least a selected one of the at least the second portion of the network part and the first portion of the network part [paragraphs 0097, 0098].

Regarding claim 11, De Beer discloses the routing information indexed at said at least the first database together with the indicia associated with the selected values of the registration request comprise host routing information entries associated with the home network provider of the mobile node [fig. 20].

Regarding claim 12, De Beer discloses wherein the routing determined by said routing determiner includes, in part, the host routing information indexed together at said at least first table with the home network provider [fig. 20].

Regarding claim 13, De Beer discloses at least one of the first network part and the second network part comprises a plurality of sub-parts, wherein said at least first table further indexes together host routing information entries with the subparts of the at least one of the first network part and the second network part [paragraphs 0038, 0082].

Regarding claim 14, De Beer discloses the routing determined by said routing determiner includes, in part, the host routing information entries indexed together at said at least first table with the subparts of the at least one of the first network part and the second network part [paragraphs 0038, 0082].

8. Claims 1, 5, 6, 15, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lannen et al., US Patent Number 5,497,412 (hereinafter Lannen).

Regarding claims 1 and 15, Lannen discloses a radio communication system having a mobile node operable to communicate data by way of a radio link with a fixed network, the mobile node associated with a home network provider that provides communication services for communication with the mobile node when the mobile node is positioned to communicate with a first portion of the fixed network, and the mobile node permitted mobility, selectably to be positioned to communicate with at least a second portion of the fixed network, communication services provided at the at least the second portion of the fixed network by at least one non-home network provider, an improvement of apparatus for facilitating determination of routing information by which to route the data communicated by the mobile node when positioned to communicate with any of the first and at least second portions of the fixed network, said apparatus

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comprising: a registration request detector adapted to receive indications of a registration request generated by the mobile node, said registration request detector for detecting values of the registration request; at least a first table accessible at least responsive to detection by said registration request detector of the values of the registration request, said first table containing routing information indexed together with indicia associated with selected values of the registration request; a routing determiner adapted selectably to receive indications of selected routing information contained in said at least the first table, said routing determiner, responsive at least in part to the routing information, for determining routing by which the data is to be communicated by the mobile node, the routing determined by said routing determiner usable by the mobile node when positioned to communicate with the any of the first and at least second portions of the fixed network [abstract; col. 2: lines 19-23; col. 2: line 49 – col. 3: line 13].

Regarding claim 5, Lannen discloses the radio communication system comprises a registration server to which the registration request formed by the mobile node is sent and wherein said registration request detector is embodied at the registration server [col. 2: line 49 – col. 3: line 13].

Regarding claims 6 and 20, Lannen discloses wherein said at least the first table and said routing determiner are embodied at the registration server [col. 2: line 49 – col. 3: line 13].



9. Claims 1, 9, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergenwall et al., US Patent Application Publication Number 6,567,664 (hereinafter Bergenwall).

Regarding claims 1 and 15, Bergenwall discloses a radio communication system having a mobile node operable to communicate data by way of a radio link with a fixed network, the mobile node associated with a home network provider that provides communication services for communication with the mobile node when the mobile node is positioned to communicate with a first portion of the fixed network, and the mobile node permitted mobility, selectably to be positioned to communicate with at least a second portion of the fixed network, communication services provided at the at least the second portion of the fixed network by at least one non-home network provider, an improvement of apparatus for facilitating determination of routing information by which to route the data communicated by the mobile node when positioned to communicate with any of the first and at least second portions of the fixed network, said apparatus comprising: a registration request detector adapted to receive indications of a registration request generated by the mobile node, said registration request detector for detecting values of the registration request; at least a first table accessible at least responsive to detection by said registration request detector of the values of the registration request, said first table containing routing information indexed together with indicia associated with selected values of the registration request; a routing determiner adapted selectably to receive indications of selected routing information contained in said at least the first table, said routing determiner, responsive at least in part to the

routing information, for determining routing by which the data is to be communicated by the mobile node, the routing determined by said routing determiner usable by the mobile node when positioned to communicate with the any of the first and at least second portions of the fixed network [abstract; col. 4: line 32 – col. 5: line 35].

Regarding claim 9, Bergenwall discloses the routing determined by said routing determiner comprises an Internet protocol address to be used to address the data to be routed by the mobile node [col. 3: line 24].

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Adamany et al., US Patent Number 6,735,429, disclose methods and systems to prevent fraudulent use of a wireless unit roaming in a visited system.

Jo et al., US Patent Application Publication Number 2002/0061746, disclose a method of global roaming services using a gateway location register in third generation mobile networks.

Chambers, US Patent Number 6,256,497, discloses interworking between telecommunication networks.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-


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7841. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAG  
December 21, 2006



ERIKA A. GARY  
PRIMARY EXAMINER